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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,698	12/12/2003	Saverio Carl Falco	BB1087 US DIV	2514

23906 7590 07/15/2005

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WILMINGTON, DE 19805

EXAMINER

BUI, PHUONG T

ART UNIT	PAPER NUMBER
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1638

DATE MAILED: 07/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/734,698	Applicant(s) FALCO ET AL.	
	Examiner Phuong T. Bui	Art Unit 1638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-55 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. ____   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____  | 6) <input type="checkbox"/> Other: ____                                     |

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-4, 6-9, 11-14, 16-19, 21-24, 26-29, 31-34, 36-39, 41-49, 53 and 54, drawn to a polynucleotide, classified in class 536, subclass 23.2.
  - II. Claims 5, 10, 15, 20, 25, 30, 35 and 40, drawn to a polypeptide, classified in class 435, subclass 183.
  - III. Claim 50, drawn to a first method of using the polynucleotide, classified in class 530, subclass 69.1.
  - IV. Claim 51, drawn to a second method of using the polynucleotide, classified in class 435, subclass 6.
  - V. Claim 52, drawn to a third method of using the polynucleotide, classified in class 536, subclass 24.33.
  - VI. Claim 55, drawn to a fourth method of using the polynucleotide, classified in class 800, subclass 278.

In addition to an election of one of inventions I-VI listed above, Applicant is required to elect one of the following inventions to which the claims must be restricted if one of inventions I-V is elected.

Group A, drawn to a polynucleotide of SEQ ID NO: 1

Group B, drawn to a polynucleotide of SEQ ID NO: 3

Group C, drawn to a polynucleotide of SEQ ID NO: 6.

Group D, drawn to a polynucleotide of SEQ ID NO: 7

Group E, drawn to a polynucleotide of SEQ ID NO: 8

Group F, drawn to a polynucleotide of SEQ ID NO: 9

Group G, drawn to a polynucleotide of SEQ ID NO: 10

Group H, drawn to a polynucleotide of SEQ ID NO: 11

Group I, drawn to a polynucleotide of SEQ ID NO: 12.

Group J, drawn to a polynucleotide of SEQ ID NO: 13

Group K, drawn to a polynucleotide of SEQ ID NO: 15

Group L, drawn to a polynucleotide of SEQ ID NO: 17

Group M, drawn to a polynucleotide of SEQ ID NO: 19

Group N, drawn to a polynucleotide of SEQ ID NO: 21

Group O, drawn to a polynucleotide of SEQ ID NO: 23

Group P, drawn to a polynucleotide of SEQ ID NO: 25

Group Q, drawn to a polynucleotide of SEQ ID NO: 28

Group R, drawn to a polynucleotide of SEQ ID NO: 29

Group S, drawn to a polynucleotide of SEQ ID NO: 30

Group T, drawn to a polynucleotide of SEQ ID NO: 31

Group U, drawn to a polynucleotide of SEQ ID NO: 32.

Group V, drawn to a polynucleotide of SEQ ID NO: 33

Group W, drawn to a polynucleotide of SEQ ID NO: 35

Group X, drawn to a polynucleotide of SEQ ID NO: 38

Group Y, drawn to a polynucleotide of SEQ ID NO: 41

If Invention VI is elected, Applicant is required to elect one of the following inventions to which the claims must be restricted:

- a. dihydrodipicolinate reductase
- b. diaminopimelate epimerase
- c. threonine synthase
- d. threonine deaminase
- e. S-adenosylmethionine synthetase

2. The inventions are distinct, each from the other because of the following reasons:

Groups A-Y are unrelated as they are drawn to structurally distinct polynucleotides encoding different polypeptides and obtained from different sources.

Groups a-e are unrelated as they are drawn to structurally distinct polypeptides and obtained from different sources.

3. Inventions I and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different effects. The polynucleotide is chemically, structurally, biologically and functionally distinct from the polypeptide.

4. Inventions I and III-VI are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product can

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be used in the methods of III-VI, each method has different steps, uses different reagents or starting materials, and has different outcomes.

5. Inventions II and III-VI are unrelated. In the instant case the methods of III-VI do not require the polypeptide of II. Also, the polypeptide of II can be made synthetically (not recombinantly) or can be obtained from its native plant source.

6. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, different searches and recognized divergent subject matter, restriction for examination purposes as indicated is proper. Furthermore, each of the sequences would require a separate database search.

7. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

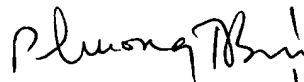
8. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong T. Bui whose telephone number is 571-272-0793.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jones can be reached on 571-272-0745. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Phuong T. Bui 7/7/05  
Primary Examiner  
Art Unit 1638

7/7/05